

DESCRIPTIONS OF TWO NEW SPECIES OF NEOTROPICAL
LEPTOGLOSSUS GUÉRIN (HEMIPTERA: COREIDAE)¹

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Abstract.—Two new species of *Leptoglossus* Guérin, *L. nigropearlei* and *L. usingeri*, are described from the Pearl Islands, Panama, and Temascaltepec, Mexico, respectively. Both species belong to the *stigma* group.

Two undescribed species of *Leptoglossus* Guérin were discovered among unidentified specimens in the collections of the California Academy of Sciences and the U.S. National Museum of Natural History (USNM). Allen's (1969) revision of *Leptoglossus* treated 38 species and Brailovsky (1976) described one additional species from Mexico. The only other recently related work in the genus was the discussion of the genitalia and comparative morphology of *L. gonagra* (Fabricius) and *L. stigma* (Herbst) by Jurberg et al. (1971).

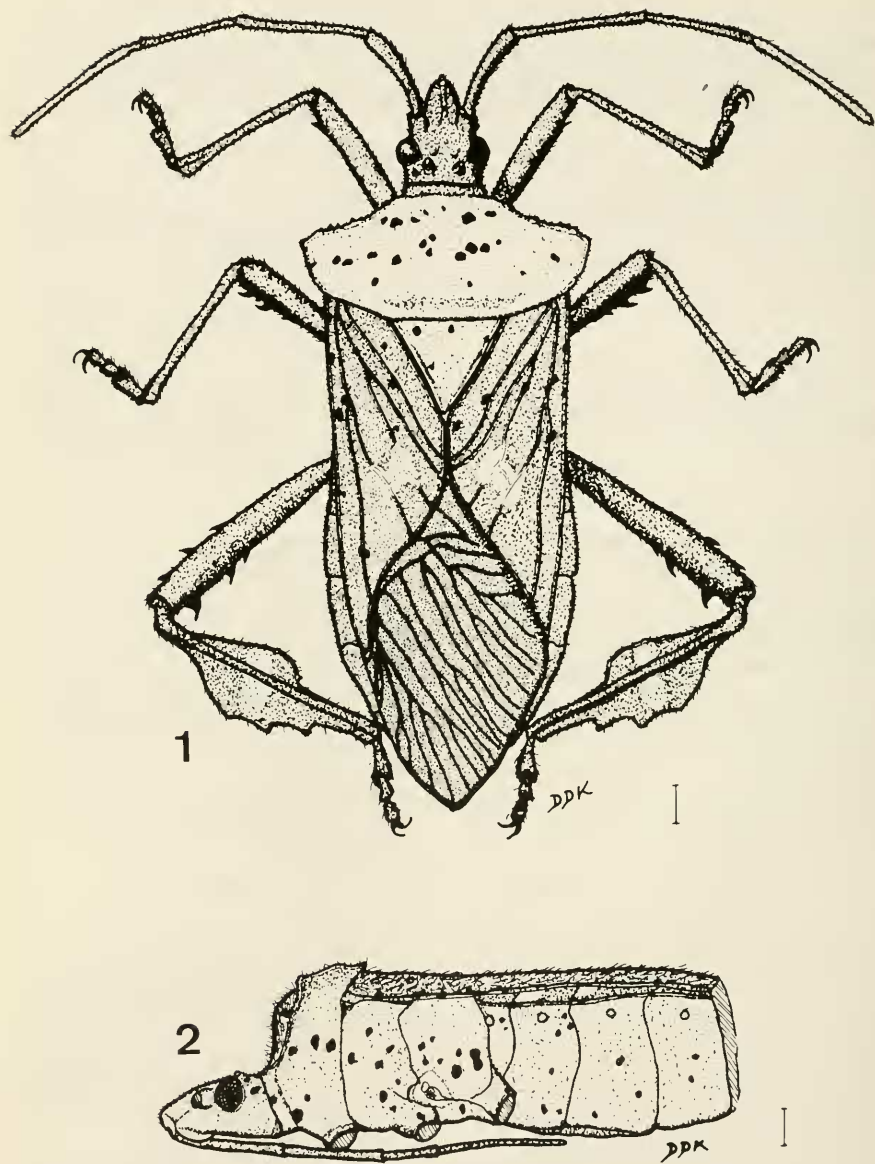
Measurements are those of the holotype with parentheses used to indicate values for paratypes. Line increments for figures equal 1 mm.

Leptoglossus nigropearlei Yonke, NEW SPECIES
Figs. 1-7

Description.—Body elongate oval, length to wing tip 20.48 mm (19.36–21.44 mm), humeral width 8.16 mm (7.20–8.32 mm), thickened dorsoventrally; dorsum light reddish brown, except pronotum with light yellowish brown in areas especially at humeral angles; entire venter light yellowish brown. Numerous small black dots randomly positioned on body, especially numerous on pronotum, thoracic pleura, and abdominal venter.

Head: Elongate, length 2.88 mm, with tylus and jugae projecting well beyond antennal sockets; tylus slightly raised above and extending beyond jugae; outer ocular width 2.88 mm, inner ocular width 1.36 mm, antecocular length 1.60 mm, inner ocellar width 0.72 mm; uniformly reddish brown on

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Figs. 1-2. *Leptoglossus nigropearlei*. 1, Allotype ♀, dorsal habitus. 2, Lateral view.

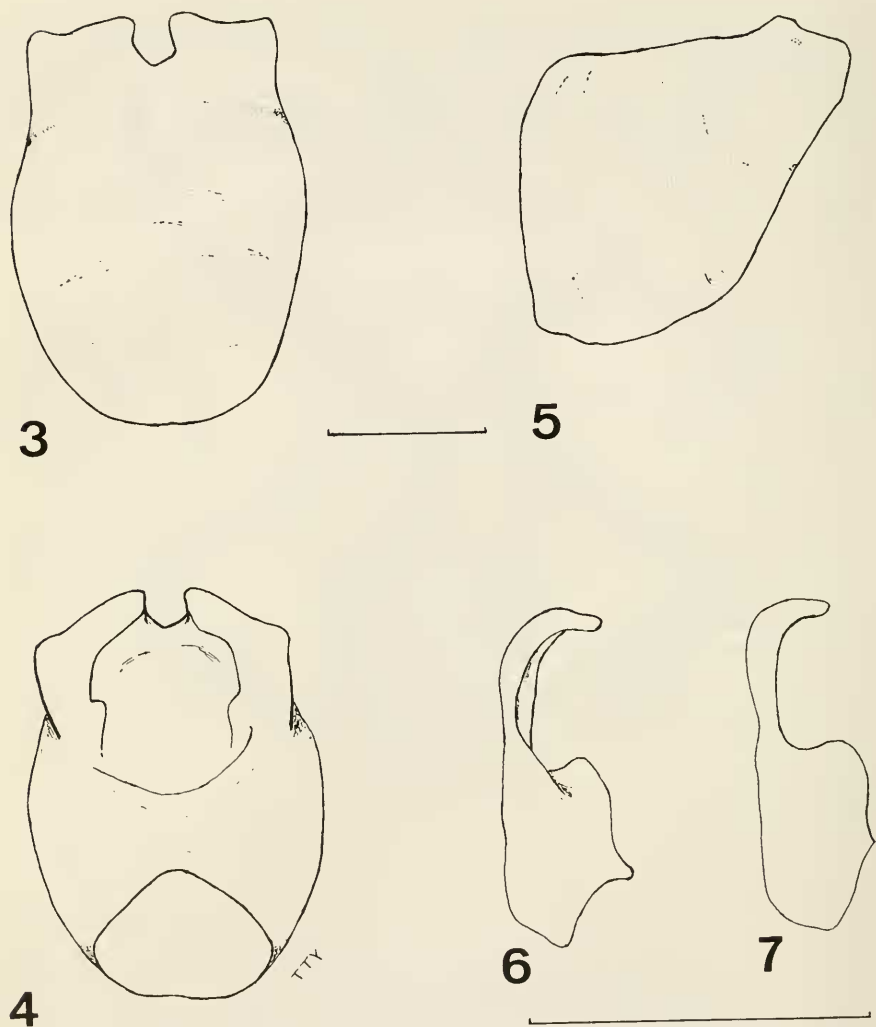
dorsum, yellowish brown on venter, except for black rim on median areas of ocellar tubercles and 2 black dots (size ca. $2\times$ ocellar diameter) behind each compound eye; bucculae short, about $\frac{1}{4}$ length of head; labium yellowish brown except for thin black rim along labial groove and apex of IV black, extending to anterior edge of 3rd abdominal sternite, segment I–2.56 mm, shorter than head, II–2.96 mm, III–1.36 mm, IV–3.36 mm; antennal segments cylindrical, yellowish brown, slightly darker at apex of II and III, segment I–2.72 mm, II–3.84 mm, III–2.72 mm, IV–4.32 mm.

Thorax: Pronotum strongly deflexed toward anterior edge, length 4.32 mm, distinct anterior pronotal collar 2.00 mm wide; anterior lateral margin with few small tubercles on cephalic $\frac{1}{2}$, larger tubercles (serrate) to humeral angle; posterior lateral margin tuberculate, entire along posterior margin, humeral angles nearly 90° ; scutellar length 2.72 mm, basal width 3.04 mm; surface densely pitted, anterior $\frac{1}{2}$ covered with erect golden setae and flattened whitish setae; pronotal color reddish brown on anterior and posterior areas, yellowish brown on disc and to humeral angles, numerous, small ($1-3\times$ diam. ocellus) black dots over pronotum; scutellum, corium and clavus reddish brown with few black dots; irregular fascia on corium; membrane brown; entire pleura yellowish brown except for numerous black dots; legs generally reddish brown, spines black at tips; profemur slender with 3–4 spines at apex; mesofemur slender with 5 spines larger approaching apex; metafemur incrassate elongate with rows of spines small on dorsal aspect, 2 ventral rows with large spines; metatibia elongate 8.32 mm (7.20–9.12 mm), leaflike, shallowly scalloped along outer margin, small black dots on dilations; inner and outer dilations each with small yellowish area; outer dilation extending to ca. 73% (63–81%) and inner dilation to ca. 62% (51–64%) of tibial length; greatest width of dilation 2.08 mm (1.92–2.32 mm).

Abdomen: Greatest width 7.12 mm (6.72–8.32 mm); connexivum light yellowish brown for anterior $\frac{1}{4}$, dark reddish brown for posterior $\frac{3}{4}$ of each segment; dorsum light orange except for black dots on tergum 2, large black patches on lateral aspect of terga 4 and 5, and smaller diffuse black areas on terga 6 and 7; sterna light yellowish brown with many black dots especially laterad; shallow midventral “rostral” groove extending from 2 to anterior $\frac{1}{2}$ of sternum 5.

Genitalia: 8th sternum with small black dots, U-shaped and wider at base, narrower near tergum; tergum 8 transversely narrow; genital capsule as in Figs. 3–5, lateral posterior margins nearly at right angles, median notch deeper than wide; claspers with broad rectangular base and slight lateral basal lobe, straight shank except for shallow median groove, hook evenly rounded (Figs. 6, 7).

Types.—Holotype, ♂, Panama, Pearl Is., San Jose, 24–VIII–1944, J. P. E. Morrison (USNM type no. 76474). Allotype, ♀, same data except 23–



Figs. 3-7. *Leptoglossus nigropearlei*. 3-5, Genital capsule. 3, Posterior view. 4, Dorsal view. 5, Lateral view. 6-7, Right paramere. 6, Ventral view. 7, Dorsal view.

VIII-1944. Paratypes, all "collected at light," 1 ♀, same data as for holotype, others with same data as for holotype except dates as follows: 1 ♂, 1 ♀, 9-VIII-1944; 1 ♀, 24-V-1944; 1 ♀, 18-VIII-1944; 1 ♀, 23-VIII-1944. The allotype and 4 paratypes have been deposited in the USNM. One ♂ and 1 ♀ paratypes have been retained in the collection of the author.

Remarks.—Males and females are similar in nearly all respects including coloration, general structure, and shape of the humeral angle. The hindfe-

mur of the male is incrassate while that of the female is more slender. Depending upon the position of the head, the labium may extend to the posterior edge of the third sternum or onto the fourth.

Based on both external features and structures of the genitalia, this species would appear to belong to the *stigma* group of Allen (1969) and be most closely related to another Panamanian species, *L. pallidivenosus* Allen. Using Allen's (1969) key, *nigropearlei* runs to couplet 11 which includes both *brevirostris* Barber and *pallidivenosus*. *Leptoglossus brevirostris* is a distinctly smaller species, ca. 16 mm in length, and possesses a shorter labium (as specified in the key). It can be separated from *pallidivenosus* on the basis of its yellowish brown rather than dark reddish brown coloration; its humeral angles being ca. 90° rather than acute; and the outer dilation of its hindtibia being shallowly scalloped as compared to the deeper scallops of *pallidivenosus*.

Etymology.—The species name takes its origin from both the morphological feature of the small pearl-like black dots common and distinct over the body, and from the type-locality, the Pearl Islands.

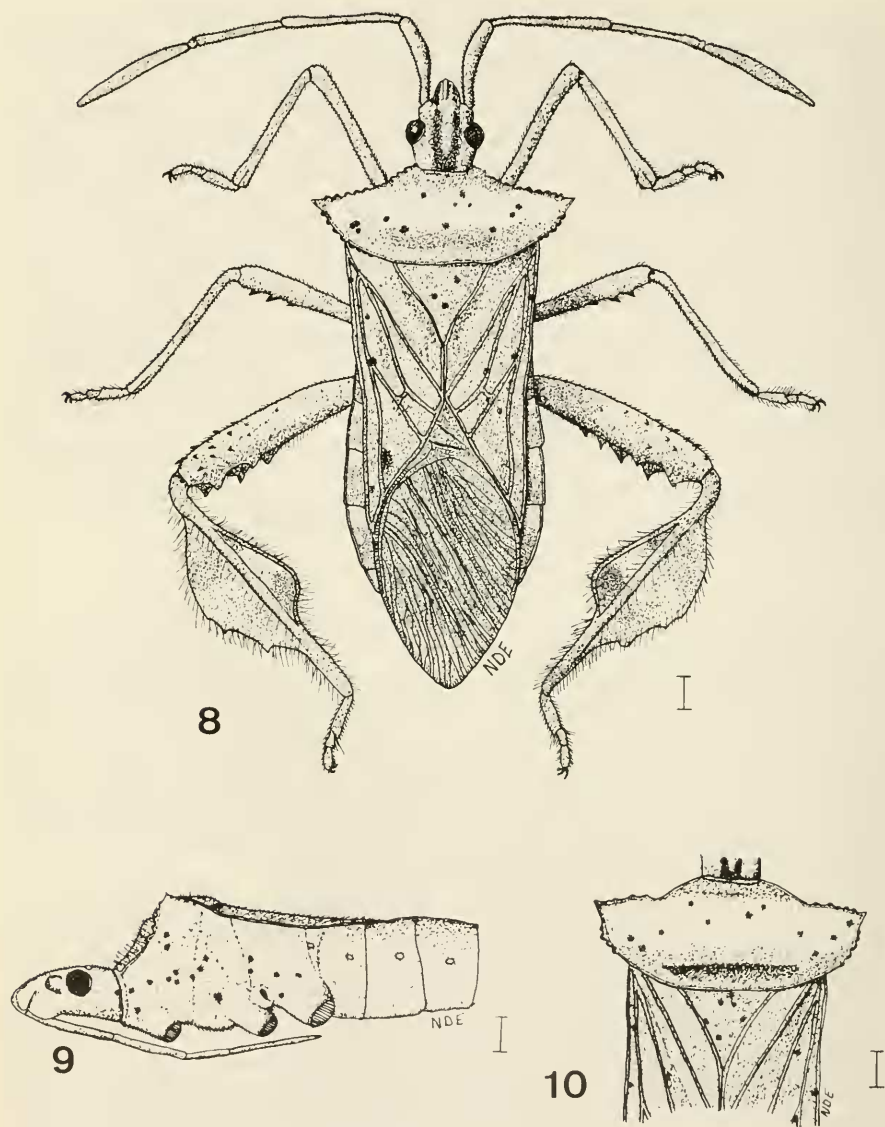
Leptoglossus usingeri Yonke, NEW SPECIES

Figs. 8–15

Description.—Body elongate oval, length 17.6 mm, to wing tip 19.04 mm (16.48–20.16 mm); humeral width 7.84 mm (7.04–8.32 mm); humeral angle extending laterad and acute on ♂ (Fig. 8), less acute and projecting anteriolaterad on ♀ (Fig. 10); color on dorsum dark reddish brown except pronotum with large transverse yellowish-orange area extending onto disc, head with 2 wide black bands from posterior edge, over ocelli and extending onto jugae; small black dots randomly positioned on body, especially common on pronotum, thoracic pleura, and abdominal venter.

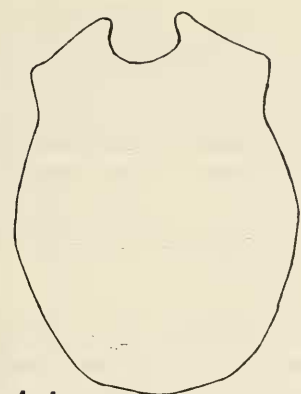
Head: Elongate, length 2.88 mm, with tylus and jugae well beyond antennal sockets, tylus slightly exceeding jugae, outer ocular width 2.40 mm, inner ocular width 1.24 mm, anteocular length 1.48 mm, inner ocellar width 0.72 mm; color dark reddish brown with 2 large, longitudinal, black bands joining posteriorly to margin of head, extending anteriorly over ocelli well onto the jugae, small black area just behind compound eye and few small black dots on posterior aspect of head; bucculae short, extending to below antennal socket; labium dark reddish brown to black, especially segment 3 and distal ½ of 4, reaching onto 3rd abdominal sternum, segment I–2.32 mm and shorter than head, II–2.48 mm, III–1.12 mm, IV–2.72 mm; antennal segments I–III reddish brown, dark at apex of each, IV dark reddish brown, segment I–2.72 mm, II–3.84 mm, III–2.72 mm, IV–4.32 mm.

Thorax: Pronotum strongly deflexed toward anterior edge, length 3.68 mm; distinct anterior pronotal collar, 1.76 mm wide; entire anterior lateral and posterior lateral margins with small black tubercles (serrated), posterior

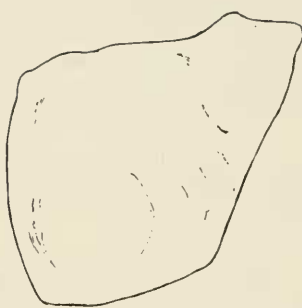


Figs. 8-10. *Leptoglossus usingeri*. 8, Holotype ♂, dorsal habitus. 9, Lateral view. 10, Paratype ♀, partial dorsal habitus.

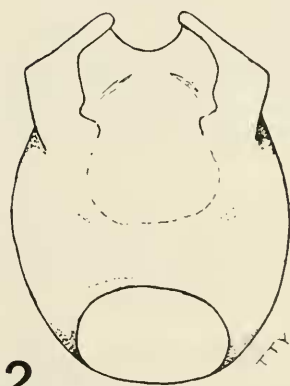
margin entire; humeral angles of ♂ acute, projecting laterad; transverse ridge just cephalad of posterior margin; scutellar length 2.56 mm, basal width 2.56 mm; pronotal color reddish brown on anterior $\frac{1}{3}$ and posterior $\frac{1}{3}$, diffuse transverse yellowish-orange area on median $\frac{1}{3}$ to humeral angles;



11



13



12



14



15



Figs. 11-15. *Leptoglossus usingeri*. 11-13, Genital capsule. 11, Posterior view. 12, Dorsal view. 13, Lateral view. 14-15, Right paramere. 14, Ventral view. 15, Dorsal view.

small black dots on pronotum, scutellum, corium and clavus; fascia on corium very light to indistinct; membrane brown; pleura reddish brown with numerous small black dots; legs generally reddish brown, coxae mostly black; pro- and mesofemora slender each with 3-4 spines nearing apex; metafemur incrassate elongate with rows of black spines, small on dorsal aspect, large in 2 ventral rows; metatibia elongate 8.4 mm, leaflike with 3 shallow scallops along outer margin, inner dilation with small orangish area;

outer dilation extended to ca. 76% (δ 66–76, η 76–80%) and inner dilation to about 67% (δ 57–67, η 67–70%) of tibial length; greatest width of dilation 2.72 mm (δ 2.08–2.40, η 2.88–3.20 mm).

Abdomen: Greatest width 6.08 mm; connexivum alternating with anterior $\frac{1}{3}$ yellowish orange and posterior $\frac{2}{3}$ dark reddish brown on each segment; dorsum generally orange except for small dark area on lateral margins of terga 4 and 5; venter reddish brown except for few small black dots; shallow midventral rostral groove extending from 2 to anterior $\frac{1}{2}$ of sternum 5.

Genitalia: 8th sternum U-shaped, wider at base and narrower near tergum, tergum 8 transversely narrow; genital capsule as in Figs. 11–13, lateral posterior margins nearly at right angles, median notch wider than deep; claspers with broad rectangular base, straight shank except for shallow median groove, hook evenly rounded (Figs. 14, 15).

Types.—Holotype, δ , allotype η , paratypes 1 δ , 2 $\eta\eta$, Temescaltepec, Mex., Mex., VII–II–33, H. E. Hinton, R. L. Usinger, collectors. The holotype, allotype and 1 paratype have been deposited in the collection of the California Academy of Sciences, and 1 δ and 1 η paratypes have been retained in the collection of the author.

Remarks.—Males and females are similar in most respects, but differ with the humeral angles of the male being acute and distinctly terminating in a spine (Fig. 8) while the angle in the female is ca. 90° and ends in a less pronounced spine; also the hindtibial dilations of the male are less broad than those of the female.

The fascia on the corium is not readily visible on these specimens, but upon close examination it is apparent that a light irregular fascia is present on three of the five types. The yellowish-orange transverse humeral band of the pronotum is somewhat mottled on the disc of one male, but distinct on the other specimens.

This species belongs to the *stigma* group of Allen (1969). Using Allen's key, *usingeri* runs through couplet 9 to couplet 12 due to the indistinct fascial markings on the corium. An examination of the types of the species treated in this section of the key demonstrates that *usingeri* is not conspecific. In addition, it is not sympatric with any of these six species.

If some specimens of *usingeri* prove to be more distinct in the fascial markings of the corium, they will key to *pallidivenosus* as does *L. nigropearlei*. *Leptoglossus usingeri* is easily separated from *nigropearlei* by its darker coloration, acute humeral angles of the male, and distinct longitudinal black ocellar bands on the head; and from *pallidivenosus* by the contrasting light and dark areas on the pronotum, the shallow scalloping of the hindtibia, and the genital capsule with a median notch shallower than wide.

Both *L. nigropearlei* and *L. usingeri* can be easily separated from *L. jacquelineae* Brailovsky since the latter species has the pronotal disc with

two large diffuse spots, the anterior lateral margin of the pronotum entire, and the outer dilation of the hindtibia extending to only 55% of the tibial length and being deeply scalloped.

Etymology.—The species name is selected in honor and memory of the distinguished hemipterist, Dr. Robert L. Usinger, one of the collectors of the type-series.

ACKNOWLEDGMENTS

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